

| Country:               | Costa Rica |
|------------------------|------------|
| Request identification | 2015000095 |
| number:                |            |

| land use planning context at local government level in Costa Rica | Title: |  |
|---|--------|--|
|---|--------|--|

#### **Summary of the CTCN Technical Assistance**

Costa Rica's National Technical Secretariat for the Environment (SETENA) sets the criteria and the technical procedure to follow when the variable of the environment is being included in land use plans. However, to date this standard has not included or recommended assessing the impact of climate change or the climate change mitigation and adaptation measures which need to be incorporated in local level land use planning in order to bolster medium and long-term resilience.

The Technical Guidelines for including the variable of the environment in land use plans in <u>Costa Rica</u> is the document used to direct the technical procedure whose structure and details are contained in the various phases of the process that SETENA stipulates must be followed when developing land use plans in terrestrial and/or marine environments.

The standards are currently being revised, meaning that this technical assistance will help bolster the inclusion of the climate change variable, so that the development of the plan takes place from an over-arching perspective in which assessment of the area's environmental condition and evaluation of the human component are coordinated and enable a roadmap towards medium and long-term sustainability for the area to be devised, including climate change adaptation and mitigation measures.

Consequently, the aim of the technical assistance is to build capacity in order to introduce the issue of climate change into land use planning, forging links with the following sectors: conservation of biodiversity, reducing vulnerability to natural disasters, planning and governance, water, coastal areas, infrastructure and urban areas.

#### 1 Summary of the CTCN Technical Assistance

## 1.1 Technology aspects

The CTCN's assistance will build the technical capacity (Orgware) of the state agency tasked with validating the environmental sustainability of the Land Use Plans (LUPs) at the national level. The technical assistance will support institutional activity seeking to make the issue of climate change a factor to be assessed by local governments as part of their land use planning processes, transferring good practice, knowledge and experience from other countries relevant to Costa Rica's context. The end goal is to help local governments to identify adaptation measures that fit with the guidelines which are being proposed at country level as part of climate change adaptation plans and policies. The assistance will also help bolster the software skills of the technical staff in SETENA's evaluating office in order to improve the LUP evaluation process within the institution.



#### **Objectives (outcomes)**

The main aim is to help increase resilience to climate change in Costa Rica by designing a protocol that would enable local governments to develop climate change adaptation and mitigation measures in the LUPs, working in conjunction with key stakeholders, such as public institutions and the country's production sectors. The process will build the technical and technological capacity of the staff working in SETENA's Strategic Environmental Assessment Department (DEAE), enabling them to develop the technical basis needed to guide local governments in the process of assessing and identifying climate change adaptation and mitigation measures in land use plans.

## 1.2 Results (outputs expected from CTCN assistance)

The first expected output is a global review of experiences of including a climate change variable in LUPs. The second expected output is a software tool to help SETENA technical staff to assess the LUPs and the third and most important outcome is the proposed protocol which includes the vision of climate change adaptation and mitigation in the <u>Technical Guidelines for including the variable of the environment in land use plans in Costa Rica</u>, a mandatory legal instrument to be used when developing LUPs in the country. At the same time, these guidelines will give local governments better insight when developing LUPs and when including climate change adaptation and mitigation initiatives.

#### 1.3 Expected use of outputs

The future protocol will enable the impact of climate change to be introduced and evaluated in land use planning processes. This constitutes a major step forward for the country in the process of implementing effective adaptation measures. Specifically, the protocol will contribute to adaptation processes which need to be developed by local governments in conjunction with sectors such as the energy, farming, health, infrastructure, biodiversity and water resources sectors, which to a large extent depend upon the planning and spatial distribution of these activities in the area.

Equally, as the protocol is an instrument designed to guide local governments when planning climate change adaptation and mitigation measures, it will make a direct contribution to measures designed to reduce the risk of disasters, public infrastructure adaptation, environmental health, capacity building (technology transfer) and to raise people's awareness and build their knowledge about climate change and community-based adaptation processes (meeting basic needs). Finally, the fact that the protocol assesses the impact of climate change on the biodiversity found in areas administered by local governments will facilitate the development of ecosystem-based processes of adaptation.



#### **2** Description of the assistance

#### 2.1 Activities

## <u>Activity 1 - Produce a report on international and national experiences relevant to the</u> Costa Rican context

This activity will involve making an overall assessment of public institutions' experiences of incorporating climate change adaptation and mitigation in their LUPs at the local government level. The experiences contained in the report will be relevant to the national context. The activity will also include a review of the proposals generated at the national level in Costa Rica in order to incorporate climate change adaptation and mitigation criteria into land use planning. This activity will take the form of a report compiling experiences from a maximum of five other countries. It is also intended as part of this activity that SETENA officials undertake an exchange with another Latin American country (such as Colombia, Chile or Mexico) which has made significant progress in this area.

| Deliverable  | Delivery date |
|--|---------------|
| Report on relevant international experiences and recommendations for       |               |
| local governments in Costa Rica on including climate change initiatives in | Week 20       |
| local government LUPs.   |               |

# <u>Activity 2 – Technical support for developing a protocol on incorporating climate change</u> initiatives into Land Use Plans (LUPs)

Activity 2 focuses on developing the technical and scientific foundations needed to introduce and evaluate climate change during land use planning processes via the Strategic Environmental Assessment Department (DEAE), which is directly responsible in SETENA for evaluating the environmental component of any proposed LUPs in the country. In concrete terms, this activity is based on developing a protocol to enable local governments to develop climate change adaptation measures in LUPs via processes coordinated with key stakeholders, such as public institutions and the country's production sectors.

## Activity 2.1 Local government needs and capacity assessment

Once the technical assistance has been delivered, SETENA will train local government officials on how to use the protocol and monitor its implementation. The technical needs and capacity of local governments will be assessed via field visits and interviews in order to ensure that the proposed protocol and guidelines to be developed during the technical assistance process meet the climate change adaptation and mitigation needs and capacity of local governments. This assessment will cover a representative sample of cantons critically exposed to climate change processes, using official information supplied by the Costa Rican Met Office. The representative cantons will be selected in conjunction with DEAE; the sample will not exceed 14 cantons. The evaluation will include a presentation of preliminary results and a consultation of local government representatives. The presentation event will last no longer than 1 day and will be attended by a maximum number of 30 local government representatives.

| Deliverable   | Delivery date |
|---|---------------|
| Local government needs and capacity assessment report | Week 20       |
| Report from the assessment presentation workshop      | Week 21       |



#### Activity 2.2 Conceptual development of the protocol

SETENA's Strategic Assessment Department has draft technical guidelines for incorporating the variable of the environment into land use plans. This activity will use these guidelines as a basis and will incorporate into them the issue of climate change adaptation and mitigation. In order to achieve this, the conceptual and technical protocol framework needs to be designed and this will be done at meetings (working groups) involving technical staff from the governmental institutions involved in land use planning (SETENA, National Groundwater, Irrigation and Drainage Service – SENARA, National Institute for Housing and Town Planning – INVU, Ministry of Housing and Human Settlements – MIVAH, Costa Rican Institute of Tourism - ICT, Institute for Municipal Development and Assistance – IFAM). The activity needs to ensure that gender equality is achieved among the participants.

The protocol will aim to introduce climate change as an element with an impact on environmental factors such as biological factors, socio-demographic aspects, land use, water resources and natural threats. These factors are all assessed as standard as part of any land use planning process in the country. However, in order to undertake an objective evaluation, the first step is to review and improve the proposed SETENA guidelines, which contain methods for assessing the aforementioned factors. Consequently, it is important that SETENA benefits from the assistance that professionals in these areas can provide within the framework of this project.

Furthermore, the guidelines suggest that land use planning in Costa Rica should include in the evaluations an analysis of the cumulative effect, with climate change being the basis for understanding how the climate and its variations are going to magnify or increase the cumulative impact that the different forms of land use included in an LUP process have on the environment. Consequently, and due to SETENA's lack of experience of this sort of evaluation, the exchange of knowledge with professionals with cumulative impact evaluation expertise is vital in order to achieve this activity's objectives.

It is also worth mentioning that the Adaptation Fund project run by Fundecooperación has approved a budget to support SETENA's monitoring of the outcomes of this technical assistance.

| Deliverables  | Delivery date |
|---|---------------|
| Report on the protocol discussion group                                 | Week 32       |
| Report on the draft protocol  | Week 32       |
| Summary of lessons learned (progress made, achievements and challenges) | Week 32       |

## Activity 2.3 Development of a GIS format decision-making tool

The protocol will involve the development of a procedure to analyze the information generated and which will be used as the basis for land zoning and land use planning. This activity will focus on improving and developing the GIS component which SETENA already has for taking decisions when conducting environmental evaluations. The purpose of this activity is to improve the current procedure and simultaneously introduce the issue of adaptation and climate change in LUPs into the evaluation. The activity will also involve using training to build the capacity of the staff members who utilize it. The procedures and information layers to be used in the analyses will be devised as a result of this activity. Funding from the National Adaptation Fund will help purchase hardware, software licences, audiovisual equipment and drones, with this hinging upon the recommendations resulting from the GIS tool developed. A five-day



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training course will be delivered to 10 public officials. The activity needs to ensure that gender equality is achieved among the participants.

| Deliverable                                    | Delivery date |
|--|---------------|
| GIS analysis procedure as part of the protocol | Week 34       |
| Training workshop                              | Week 34       |

#### Activity 2.4 Development of the protocol for inclusion in the Technical Guidelines

The outcomes of activity 2.2 will be used to consolidate the draft Technical Guidelines for Environmental Impact Evaluation for the Strategic Environmental Assessment in which the procedure for incorporating the variable of the environment into master plans and other land use planning, including the issue of climate change adaptation and mitigation, is described in detail. The draft guidelines will be submitted to a technical discussion workshop attended by public officials from various SETENA departments and some of the institutions involved in the issue of land use planning who are taking part in this process. A maximum of 20 public officials will take part in the workshop.

| Deliverables  | Delivery date |
|---|---------------|
| Report from the technical institutional workshop to review the guidelines               | Week 36       |
| Draft guidelines incorporating climate change into the protocol or technical guidelines | Week 36       |

# $\frac{Activity\ 3-Consolidation\ and\ consultation\ about\ the\ protocol\ on\ incorporating\ climate}{change\ initiatives\ into\ LUPs}$

The protocol will be evaluated by carrying out a pilot test. The outcome will provide information for a national consultation workshop which will present a consolidated version of the final protocol proposal for the authorities' consideration.

#### Activity 3.1 Pilot application of the protocol to a master plan

The protocol will be trialled in an area with a zoning proposal which can be used as part of the pilot exercise. The proposal will have been chosen during the Activity 2.4 conceptual framework discussion workshop in conjunction with SETENA and possibly with the other participants. A number of selection criteria will be set determining or including the greatest possible variety of aspects used to evaluate the correct application of the protocol to the inclusion of climate change adaptation and mitigation measures as part of land use planning. This evaluation will be conducted using the results collected in situ and during the consultations with the canton's residents and organizations. This process will have to submit a case study report and a new version of the revised and updated guidelines based on the information obtained from the pilot application. The activity needs to ensure that gender equality is achieved among the participants.

| Deliverables   | Delivery date |
|--|---------------|
| Case study of a pilot application of the protocol to a master plan | Week 44       |
| Draft updated guidelines – consolidated version                    | Week 50       |

Activity 3.2 Presentation of recommendations for the protocol at a final national event for the inclusion of climate change initiatives in LUPs





A final presentation of the outcome will be delivered and will involve the technical and interministerial committee on climate change, academic institutions (UNA School of Geography, the Sustainable Urban Development Research Programme, University of Costa Rica, university research institutes working on land use planning) and the Citizen Climate Change Council (30 participants). The aim is to present the consolidated proposal, taking into consideration the lessons from activity 2.1, for the authorities to consider. In the short term, this will foster a discussion on the inclusion of the protocol in the legal regulations as part of the process that SETENA needs to lead in order to ensure that the standards are incorporated into its work. The activity needs to ensure that gender equality is achieved among the participants. The Adaptation Fund project run by Fundecooperación has approved a budget to support SETENA's monitoring of the outcomes of this technical assistance.

| Deliverables   | Delivery date |
|--|---------------|
| Presentation of the recommended version so as to consolidate the protocol at national event(s) | Week 52       |
| Report on the final event  | Week 53       |
| Summary of lessons learned (progress made, achievements and challenges)                        | Week 53       |

#### 2.2 Synergies and baseline setting

This initiative is part of the institutional review process of Part III of the EIA Manual of Technical Instruments relating to Strategic Environmental Evaluation: procedure for including the variable of the environment in master plans and other land use planning in accordance with the criteria stipulated by the Ministry of the Environment and Energy's SETENA.

#### 2.3 Timeline

| Activity   |  | Month |   |   |   |   |   |   |   |    |    |    |  |
|--|--|-------|---|---|---|---|---|---|---|----|----|----|--|
|  |  | 2     | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
| 1. Review of international and national experiences    |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 1.1.1 Identify relevant domestic and international     |  |       |   |   |   |   |   |   |   |    |    |    |  |
| experiences.   |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 1.1.2 Technical report with relevant international     |  |       |   |   |   |   |   |   |   |    |    |    |  |
| experiences (deliverable)                              |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2. Technical support with developing the protocol      |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.1 Needs and capacity assessment                      |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.2.1 Design the instrument                            |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.2.2. Field visits to key local governments           |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.2.3 Discussion event with local governments          |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.2.4 Local government needs assessment report         |  |       |   |   |   |   |   |   |   |    |    |    |  |
| (deliverable)  |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.2 Conceptual development of the protocol             |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.3.1 Conceptual development of the protocol           |  |       |   |   |   |   |   |   |   |    |    |    |  |
| (deliverable)  |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.3.2 Exchange of experiences with other countries     |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.3.3 Conceptual framework proposal discussion event   |  |       |   |   |   |   |   |   |   |    |    |    |  |
| (deliverable)  |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.3 GIS tool development                               |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.4.1 Analysis of current demand on SETENA's system    |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.4.1 Development of GIS tool (deliverable)            |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.4.2 Validation of the GIS tool in SETENA's system    |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.4.3 Tool training course                             |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.4 Development of the protocol for inclusion in the   |  |       |   |   |   |   |   |   |   |    |    |    |  |
| guidelines   |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.5.1 Revision of the current guidelines               |  |       |   |   |   |   |   |   |   |    |    |    |  |
| 2.5.2 National guidelines revision event (deliverable) |  |       |   |   |   |   |   |   |   |    |    |    |  |





| 2.5.3 Incorporate the protocol results into the guidelines |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| 2.5.4 Climate change is included in the proposed           |  |  |  |  |  |  |
| guidelines (deliverable)                                   |  |  |  |  |  |  |
| 3. Consolidation and presentation of the protocol          |  |  |  |  |  |  |
| proposal   |  |  |  |  |  |  |
| 3.1 Pilot application                                      |  |  |  |  |  |  |
| 2.1.1 Identify a local government for validation           |  |  |  |  |  |  |
| 2.1.2 Processing the required information                  |  |  |  |  |  |  |
| 2.1.3 Protocol validation process                          |  |  |  |  |  |  |
| 2.1.4 Draft the pilot application case study (deliverable) |  |  |  |  |  |  |
| 2.1.5 Draft updated guidelines (deliverable)               |  |  |  |  |  |  |
| 3.2 Presentation of protocol recommendations               |  |  |  |  |  |  |
| 3.2.1 Consultation events with key stakeholders            |  |  |  |  |  |  |
| (deliverable)  |  |  |  |  |  |  |
| 3.2.2 Presentation of the consolidated version             |  |  |  |  |  |  |
| (deliverable)  |  |  |  |  |  |  |

# 2.4 Expertise required

| Activity 1. Review of international and national experiences |   |  |  |  |  |  |
|--|---|--|--|--|--|--|
| Expert 1   | LUP adaptation and mitigation methods expertise, 20 man/days                    |  |  |  |  |  |
| Expert 2   | Climate change adaptation methods at local government level, 20 man/days        |  |  |  |  |  |
| Activity 2. Te   | chnical support with developing the protocol                                    |  |  |  |  |  |
| Expert 1   | Planning climate change adaptation at local government level, 15 man/days       |  |  |  |  |  |
| Expert 2   | Planning climate change mitigation at local government level, 15 man/days       |  |  |  |  |  |
| Expert 3   | Evaluation of cumulative effects, 15 man/days                                   |  |  |  |  |  |
| Expert 4   | Assessing adaptation costs, 15 man/days   |  |  |  |  |  |
| Expert 5   | GIS tool programming, 52 man/days   |  |  |  |  |  |
| Expert 6   | Incorporating the social and gender variables into adaptation, 20 man/days      |  |  |  |  |  |
| Expert 7   | Climate change scenarios and land use modelling, 20 man/days                    |  |  |  |  |  |
| Event 1  | SETENA technical staff exchange of experiences trip                             |  |  |  |  |  |
| Event 2  | Workshop with local governments, 20 participants                                |  |  |  |  |  |
| Event 3  | Proposed conceptual framework discussion workshop, 30 participants              |  |  |  |  |  |
| Event 4  | GIS tool training course (five days), 10 participants                           |  |  |  |  |  |
| Event 5  | Revised proposed guidelines discussion workshop, 30 participants                |  |  |  |  |  |
| Activity 3. Co   | onsolidation and presentation of the protocol proposal                          |  |  |  |  |  |
| Event 1  | Technical workshop on the pilot application of the protocol, 10 participants    |  |  |  |  |  |
| Event 2  | Final presentation of the final proposal with key stakeholders, 30 participants |  |  |  |  |  |

# 2.5 Main partners

| Stakeholder   | Role to support the implementation of the CTCN assistance   |
|---|---|
| Ministry of the Environment and                                   | National Designated Entity (NDE).   |
| Energy and its departments (Climate                               | Main country counterpart for the CTCN experts for admin matters.  |
| Change Department)  |   |
| National Technical Secretariat for the                            | Implementation department and main beneficiary of the technical assistance  |
| Environment (SETENA)/ Ministry of                                 | because SETENA holds responsibility for reviewing the environmental   |
| the Environment and Energy  | viability of the master plans.  |
| Local governments   | Local governments are tasked with developing LUPs in Costa Rica. Consequently, they need to be key stakeholders in the process as they will be tasked with coordinating and implementing the climate change adaptation measures put forward in the zoning and land use proposal (i.e. the master plan). |
| National Groundwater, Irrigation and<br>Drainage Service – SENARA | SENARA's participation is vital because it is the official entity which must ensure that water-related adaptation measures are implemented in accordance with the terms of the restoration and development plans.   |
| National Emergency Committee -<br>CNE                             | Regarding the LUPs, the CNE helps local governments to identify and implement risk prevention and mitigation measures in vulnerable areas, placing the emphasis on those related to the threat of climate change, meaning that the committee needs to contribute to the process in this area.           |



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| Ministry of Housing and Human<br>Settlements - INVU | Once the cantonal LUPs have been approved, INVU's legal mandate is to guarantee that the proposed adaptation measures are maintained when the local government undertakes the environmental viability formalities with SETENA, meaning that INVU is a key player in the discussions.   |
|---|--|
| Costa Rican Institute of Tourism - ICT              | Once the marine-costal area LUPs have been approved, the ICT's legal mandate for marine and coastal areas is to guarantee that the proposed adaptation measures are maintained when the local government undertakes the environmental viability formalities with SETENA, meaning that INVU is a key player in the discussions. |

## 2.6 Indicative budget

| Activities  | Estimated budget (in US\$) |
|---|----------------------------|
| Activity 1 – Report on international and national experiences | 30.000                     |
| Activity 2 - Technical support with developing the protocol   | 171.000                    |
| Activity 3 - Presentation of recommendations                  | 32,000                     |
| Measures, evaluation and learning                             | 12,000                     |
| Total   | 245,000                    |

## 2.7 Gender considerations

Efforts will be made to ensure gender equality in the workshops, working groups and other events, as well as among the international experts involved in delivering technical assistance. Moreover, the proposed activities include the revision and development of the socio-economic component of the protocol, meaning that efforts will be made to ensure that gender is reflected in the final proposed version of the protocol and technical guidelines.

## 2.8 Risk identification and mitigation

| Risk   | Consequence  | Probability | Mitigation measure  |
|--|--|-------------|---|
| Changes to legislation   | The technical assistance will no longer be relevant and will have to be cancelled. | Low         | Guarantee commitment at the highest political and institutional level to support the project using the counterpart in Costa Rica (SETENA) and involving the relevant entities in the initial discussions/workshops. |
| Changes to government policy   | The technical assistance will no longer be relevant and will have to be cancelled. | Low         | Guarantee commitment at the highest political and institutional level to support the project using the counterpart in Costa Rica (SETENA) and involving the relevant entities in the initial discussions/workshops. |
| Insufficient local government involvement  | government taken on board by the main actors who                                   |             | The sector needs to be involved right from the outset.  |
| Insufficient involvement of other governmental stakeholders  Standards are not properly incorporated due to a lack of discussion with regulating governmental entities |  | Medium      | The sectors need to be involved right from the outset.  |



# 3 Long-term impacts of the assistance

# 3.1 Expected climate change-related benefits

|    | CTCN climate technology impact   | Anticipated contribution from CTCN assistance  |
|----|--|--|
| 1  | Climate technologies adapted to the national context are identified and prioritized to enable their deployment and/or transfer in the requesting countries | The aim of the technical assistance is to incorporate the best existing land use planning and climate change adaptation and mitigation knowledge.  |
| 2  | New national Technology Needs<br>Assessment (TNA) and Technology Action<br>Plan (TAP) as a result of the response  |  |
| 3  | Progress made against mitigation objectives (i.e. energy and carbon intensity reduction) as a result of the response                                       | The inclusion of emissions reduction in local government land use planning is an end goal of the technical assistance.   |
| 4  | Progress made against adaptation or resilience objectives (e.g. climate vulnerability index improvement) as a result of the response                       | The inclusion of adaptation and resilience objectives in local government land use planning is an end goal of the technical assistance.  |
| 5  | New mitigation or adaptation technology projects/initiatives implemented as a result of the response   | The technical assistance should propose new ideas for mitigation and adaptation technology at the local land use planning level.   |
| 6  | New or strengthened policies/ laws developed, approved and enacted as a result of the response   | The expected result of the technical assistance will become a mandatory legal regulation.  |
| 7  | New policies/laws where climate change was mainstreamed as a result of the response  | Costa Rica is currently debating a Climate Change Law. The technical assistance could make a contribution to the discussions underway.   |
| 8  | Country integrates climate change mitigation and/or adaptation issues into its planning and policies as a result of the response                           | The expected result of the technical assistance will become a mandatory legal regulation.  |
| 9  | New or strengthened Public-Private Partnerships (PPP) created directly as a result of the response.  | All the social stakeholders will be involved as the technical assistance is focused on strengthening local level land use planning.  |
| 10 | New or strengthened twinning arrangement created as a result of the response   | The technical assistance should help foster improved understanding between all the institutions involved in land use planning in Costa Rica.   |
| 11 | Capacities to access and attract public and private finance increase to enable financing of technology deployment  | There is already an agreement which supports some of the implementation of the results of the technical assistance. The Adaptation Fund project run by Fundecooperación has approved a budget to support SETENA's monitoring of the outcomes of this technical assistance. |
| 12 | Post-response intervention funding attributable to the response.   | Additional funding will be required for this area as SETENA is seeking to build local government capacity with regard to incorporating climate change in local-level land use planning.  |
| 13 | Framework and analysis of local production developed to enable deployment of national production of climate technologies                                   | Implementation of the guidelines which the technical assistance will help to develop may lead to new climate technologies for land use planning being created.   |





# 3.2 Co-benefits

|    | Sustainable development goal   | Contribution from CTCN assistance  |
|----|--|--|
| 1  | End poverty in all its forms everywhere  | The land use planning process involves improved management of land, preventing soil erosion and declining fertility, which could help reduce poverty in rural areas.                         |
| 2  | End hunger, achieve food security and improved nutrition, and promote sustainable agriculture  | Land use planning incorporating the issue of the climate helps<br>to improve the resilience of food and nutritional security plans<br>and programmes which need to be aligned with the LUPs. |
| 3  | Ensure healthy lives and promote well-being for all at all ages  | Land use planning complete with climate change adaptation and mitigation measures helps communities to adapt and helps improve their quality of life.  |
| 6  | Ensure availability and sustainable management of water and sanitation for all   | Adapting to climate change (as applied in land use plans) will guarantee water management.   |
| 7  | Ensure access to affordable, reliable, sustainable, and modern energy for all  | Climate change mitigation (as applied in land use plans) will guarantee effective energy management.   |
| 9  | Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation  | Land use planning with climate change adaptation and mitigation measures fosters improved infrastructure planning and industrial development.  |
| 11 | Make cities inclusive, safe, resilient and sustainable   | Land use planning with climate change adaptation and mitigation measures fosters improved planning of cities and human settlements.  |
| 12 | Ensure sustainable consumption and production patterns   | Land use planning with climate change adaptation and mitigation measures fosters better consumption patterns.  |
| 13 | Take urgent action to combat climate change and its impacts  | The core theme of the technical assistance is including climate change initiatives in land use planning, meaning that the impact of climate change is being addressed.                       |
| 14 | Conserve and sustainably use the oceans, seas and marine resources for sustainable development   | The technical assistance process based on including climate change in land use planning bolsters the sustainable management of coastal and marine resources.                                 |
| 15 | Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss | The technical assistance process based on including climate change in land use planning bolsters the sustainable management of biodiversity and the ecosystems that support it.              |



## 3.3 Post-assistance plans and actions

Once the protocol incorporating climate change into land use planning processes has been developed, the post-assistance actions will be as follows:

- Training on how to use the technical guidelines for the 81 local governments in Costa Rica tasked with developing and rolling out LUPs.
- Dissemination of SETENA's new approach to environmental assessment in land use planning and strategic planning processes to other public institutions, the country's production sectors, academia and civil society.
- Ongoing assessment of the protocols used to introduce the variable of the environment into land use planning processes based on developments in Costa Rica with regard to the implementation of policies, the National Adaptation Plan and Sector Plans.
- Monitoring the effectiveness of the climate change adaptation measures put forward by the
  local governments as part of the restoration and development plans which accompany any
  land use planning proposal. The Adaptation Fund project run by Fundecooperación has
  approved a budget to support SETENA's monitoring of the outcomes of this technical
  assistance.

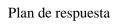
#### 3.4 Monitoring and Reporting of technical assistance results and impacts

The activities and expected milestones are detailed in sections 1.3.3 and the performance indicators table found below (please also refer to the logframe found in Annex 1 of this response plan). The main implementer of this response plan will work in partnership with the Costa Rica NDE and the CTCN to closely monitor the progress and outcomes of the activities. The main implementer is responsible for checking that the technical assistance keeps pace with the timeline and the associated milestones and for informing the NDE and the CTCN about the outcomes. The main implementer shall provide a brief summary at the end of each activity. This report will summarize the lessons learned from each activity and will discuss the progress, achievements and challenges encountered when rolling out the activity. A teleconference will be held every month with the stakeholders involved in implementation to discuss the progress of the technical assistance, the challenges, and any adjustments that may be required. The main implementer is tasked with planning any adjustments. Any suggested changes to activities, process and / or approaches as listed in the response plan must be accepted by CTCN and the NDE before being applied.



| Performance indicators of CTCN Assistance  |   |  |  |   |  |  |  |
|--|---|--|--|---|--|--|--|
| Response output (Linking to section 1.2)  How output will be used to ensure creation of result                 |   | Expected result  | Expected outcome of result (Linking to section 1.1)  | Anticipated impact that outcome will produce (Linking to section 3)   |  |  |  |
| Report on international experiences of including climate change initiatives in local government land use plans | The report will provide information about lessons learned in other countries and will supply examples of how to incorporate the issue of climate change into land use planning. | Technical report about international experiences in this area.   | Improved understanding of the issue of land use planning and climate change at the local government level. | Capacity building.  |  |  |  |
| Local government needs and capacity assessment report  | The report will be used to assess local governments' understanding of the issue of incorporating climate change into land use planning.   | Technical report on needs and capacity to include the issue of climate change into local government land use planning. | Identify needs and build capacity at local government level.   | Guidelines for devising local government climate change capacity building practices.  |  |  |  |
| Report on the draft protocol   | The report will serve as the basis for designing the decision-making tool and protocol application guidelines.  | Proposed protocol  | The protocol is signed off from a technical perspective by institutional technical staff and experts.      | Capacity has been built in SETENA so that staff members have a better understanding of the issue of climate change in LUPs. |  |  |  |
| GIS decision-making tool   | The tool will be used for decision-making when implementing the protocol.   | Decision-making tool designed and implemented.   | SETENA incorporates the tool in its activities.  | Technology is used when evaluating the incorporation of climate change in LUPs.   |  |  |  |
| Proposed protocol application guidelines   | The guidelines will be used as a technical instrument when implementing the protocol.   | Proposed protocol application guidelines   | Improved understanding of the protocol   | Capacity has been built   |  |  |  |
| Pilot application of the protocol to a master plan case study  | An example of how the protocol can be applied in practice.  | Case study technical report  | Improved understanding of the protocol   | Capacity has been built   |  |  |  |
| Draft updated guidelines – consolidated version  | Final output to be delivered by the technical assistance  | Updated technical guidelines   | SETENA has a protocol for assessing the incorporation of climate change into LUPs.                         | SETENA incorporates the protocol into the regulations governing the environmental viability of LUPs.                        |  |  |  |

# Asistencia técnica del CRTC





# 4 Signatures

| Signatures of the requesting country |                            |  |  |  |
|--------------------------------------|----------------------------|--|--|--|
| NDE                                  | Request Proponent          |  |  |  |
| Name:                                | Name:                      |  |  |  |
| Title:                               | Title:                     |  |  |  |
| Date:                                | Date:                      |  |  |  |
| Signature:                           | Signature:                 |  |  |  |
| Signatures of the CTCN               |                            |  |  |  |
| CTCN Director                        | Climate Technology Manager |  |  |  |
| Name:                                | Name:                      |  |  |  |
| Title:                               | Title:                     |  |  |  |
| Date:                                | Date:                      |  |  |  |
| Signature:                           | Signature:                 |  |  |  |



# **Annex 1: Response Logframe**

| Activity (Link to section 2)   | Description of sub-<br>activities conducted by<br>the CTCN                           | Output/Deliverable<br>(Link to section 2.9)  | Expected result (Link to section 3)   | Main national partners involved           | Objectively Verifiable<br>Indicator  | Means of Verification (data<br>source, method of<br>collection, responsibility and<br>periodicity) |
|--|--|--|---|---|--|--|
| Activity 1 – Produce a report on international and national experiences relevant to the Costa Rican context                      | Activity 1.1. Review of international and national experiences                       | Report on international<br>experiences of<br>including climate<br>change by local<br>governments   | Technical report about international experiences in this area.  | DCC-SETENA                                | Technical report produced  | Reviewed via the web<br>and interviews with<br>local organizations                                 |
|  | Activity 2.1 Local government needs and capacity assessment                          | Local government<br>needs and capacity<br>assessment report  | Technical report on needs<br>and capacity to include<br>the issue of climate<br>change into local<br>government land use<br>planning. | DCC-SETENA                                | Technical report produced     Interview minutes  | Survey and interviews<br>with local government<br>officials  |
| Activity 2 – Technical support with developing a protocol on incorporating climate change initiatives into Land Use Plans (LUPs) | Activity 2.2 - Conceptual development of the protocol                                | <ul> <li>Report on the protocol<br/>discussion group</li> <li>Report on the draft<br/>protocol</li> </ul>                                  | Proposed protocol   | DCC-SETENA-GL-<br>SENARA-CNE-INVU-<br>ICT | <ul> <li>Number of participants</li> <li>Number of female participants</li> <li>Technical report produced</li> </ul> | Results of the working group discussions   |
|  | Activity 2.3 - Development of a GIS- based decision-making tool                      | GIS decision-making tool   | Decision-making tool designed and implemented.  | DCC-SETENA                                | Tool installed   | Interviews with tool users   |
|  | Activity 2.4 - Development of the protocol for inclusion in the Technical Guidelines | <ul> <li>Report from the<br/>conceptual framework<br/>discussion workshop</li> <li>Proposed protocol<br/>application guidelines</li> </ul> | Proposed protocol application guidelines  | DCC-SETENA-GL-<br>SENARA-CNE-INVU-<br>ICT | <ul> <li>Number of participants</li> <li>Number of female participants</li> <li>Technical report</li> </ul>          | Results of the working group discussions   |





Response Plan

| Activity (Link to section 2)   | Description of sub-<br>activities conducted by<br>the CTCN   | Output/Deliverable<br>(Link to section 2.9)  | Expected result (Link to section 3) | Main national partners involved           | Objectively Verifiable<br>Indicator                  | Means of Verification (data<br>source, method of<br>collection, responsibility and<br>periodicity)       |
|--|--|--|-------------------------------------|---|--|--|
|  |  |  |                                     |   | produced   |  |
| Consolidation and consultation about the protocol on incorporating climate change initiatives into Land Use Plans (LUPs) | Activity 3.1 Pilot application of the protocol to a master plan  | <ul> <li>Pilot application of the protocol to a master plan case study</li> <li>Draft updated guidelines – consolidated version</li> </ul> | Case study technical report         | DCC-SETENA                                | Technical report produced                            | <ul> <li>Interviews with protocol users</li> <li>Field practical sessions with protocol users</li> </ul> |
|  | Activity 3.2 - National consultation about the protocol on including climate change initiatives into LUPs. | <ul> <li>Presentation of the consolidated version of the protocol at the national workshop</li> <li>National workshop report</li> </ul>    | Updated technical guidelines        | DCC-SETENA-GL-<br>SENARA-CNE-INVU-<br>ICT | Number of participants     Technical report produced | Outcomes of<br>discussions with<br>protocol users  |

DCC: Climate Change Department

**SETENA:** National Technical Secretariat for the Environment

LG: Local governments

**SENARA:** National Groundwater, Irrigation and Drainage Service

**CNE:** National Emergency Committee

**INVU:** Ministry of Housing and Human Settlements

ICT: Costa Rican Institute of Tourism